

6th April, 1965.

Dr. Marshall Nirenberg,  
Dept. of Health, Education and Welfare,  
N.I.H.,  
Bethesda 14, Md.,  
U.S.A.

Dear Marshall,

I've now had time to digest the table you gave me, but I have only minor comments:

1. Did you mean ApUpG for Leu (written in at the table) or is this a slip for UpUpG?
2. I notice that UpGpA did not work for Trypt, but feel one should suspend judgement on this till UpGpG has been tested.
3. I know its a nuisance to check cysteine, but I feel you should at least try it against UpGpC and UpGpA. Incidentally they feel here that a stronger method may be needed to obtain it from cystine.

May I also badger you about two points concerning the way you present your results. I think one should be most careful to distinguish between the triplets you have tested and those you guess. For example, I was under the impression that you had tested GUC for Val, but I can't find your evidence for this. Streisinger also thought you had tested GCC, GCA, and GCG. If people ask you "what is GCA" and you say "Alanine" (which is most probably the right answer) they naturally think you have already tested it!

The other point is quite trivial. Could I persuade you to use the standard order CUAG? You use this for the 1st and 3rd letters, whereas for the 2nd letter you use UCGA. (Incidentally you put Gly for Glu in your Table 4, but I'm sure you must have spotted this.)

Dr. Marshall Nirenberg

- 2 -

6th April, 1965.

Do please forgive these rather petty comments on what is really a wonderful piece of work.

There is really very little to report here at the moment. We are of course mainly interested in triplets related to chain termination and suppression. Brian Clark is trying to make UpGpG, to test for Trypt. Could you possibly spare us a little of UpGpA, UpApA and UpUpG? We would be most grateful if you would.

Looking forward to seeing you at the Gordon Conference,

F. H. C. Crick